Amendments to the Specification

Please replace the paragraph beginning on page 15, line 2, with the following rewritten paragraph:

After forming the electrode for the electrostatic adsorption 3 and the heating layer 4 in both sides of the supporting substrate 1 as described above, the heating apparatus 6 which has an electrostatic adsorption function can be obtained by forming the insulating layer 5 so that it may cover the electrode for electrostatic adsorption 3 and the heating layer 4. At that time, the insulating layer is formed so that the volume resistivity of the insulating layer 5 is varied in a plane, according to the present invention ~~(Fig. 2 (d)).~~ (Fig. 2(d) and Fig. 3).

Please replace the paragraph beginning on page 15, line 20, with the following rewritten paragraph:

More specifically, referring to Fig. 3, the volume resistibility in a ~~plane~~ plane 10, 12 of the insulating layer can be varied at a distribution such that it may be low at a center ~~part~~ part 14, 16 and high at a peripheral ~~part~~ part 15, 17 in the shape of a concentric ~~circle~~ circle 11, 13 by supplying the dope gas from a nozzle directed to the center part of the substrate when the insulating layer 5 is deposited by a CVD method. By depositing in such a way, a dopant concentration becomes high at a center part and becomes low at a peripheral part. On the contrary, the dopant concentration can be made high at a peripheral part by supplying the dope gas from the peripheral part. Alternatively, by arranging two or more nozzles, a dopant concentration can be varied at each nozzle. In the case of a sintering method, the impurities can be mixed therein with varying an amount of impurities partially when a sintering is performed.

Please replace the paragraph beginning on page 16, line 9, with the following rewritten paragraph:

The variation of the volume ~~resistivity~~ resistivity 18, 19 of the insulating layer 5 can be controlled suitably depending on the heat environment where the heating apparatus is used or the like, at this time. For example, the temperature distribution of the wafer at the time of heating a wafer in the heat environment where the manufactured heating apparatus is used is investigated beforehand, and the volume ~~resistivity~~ resistivity 18, 19 of the insulating layer 5 is changed so that the turbulence of the temperature distribution of the wafer may be offset, namely so that the volume ~~resistivity~~ resistivity 18, 19 of the insulating ~~layer~~ layer 5 may be made smaller to provide a large electrostatic adsorption power in the range where the wafer temperature is low, and the other hand the volume ~~resistivity~~ resistivity 18, 19 of the insulating layer may be made larger to provide a small electrostatic adsorption power in the range where the wafer temperature is high. Thereby, the heating apparatus which can heat a wafer uniformly can be manufactured.

Please replace the paragraph beginning on page 21, line 18, with the following rewritten paragraph:

After forming the insulating layer, the insulating layer on the side of the electrode for electrostatic adsorption to be a wafer adsorption surface was subjected to mirror polishing, and thereby the heating apparatus which has an electrostatic adsorption function was produced. The volume ~~resistivity~~ resistivity 18, 19 of the insulating layer in the produced heating apparatus was measured at this time. It was 2×10^{14} $\Omega \cdot$ cm in the center part of the insulating layer, and was gradually lowered from 2×10^{14} $\Omega \cdot$ cm of the ~~center~~ center 14, 16 of the insulating layer to 5×10^{10} $\Omega \cdot$ cm of the peripheral ~~part.~~part 15, 17.

Please replace the paragraph beginning on page 23, line 8, with the following rewritten paragraph:

It is apparent from the table 1 that in the case of the silicon wafer heated using the heating apparatus (Example) wherein the volume ~~resistivity~~ resistivity 18, 19 of the insulating

layer is varied in the shape of a concentric ~~circle,~~ circle 11, 13, a temperature-difference ΔT in a plane of the wafer is as small as 5 °C, and the temperature distribution of the wafer is very uniform. On the other hand, in the case of the silicon wafer heated using the heating apparatus (Comparative Example) wherein the volume resistivity of the insulating layer is uniform, at the closer to the peripheral part of the silicon wafer the temperature of the wafer becomes low, and a temperature-difference ΔT in a plane of the wafer is as large as 19 °C, and thus the temperature distribution of the wafer is degraded.